CLAIMS

What is claimed is:

1. A system capable of dynamically configuring a multi-node computer, the system comprising:

a plurality of processor nodes; and

a scalability management module directly coupled to each of the plurality of processor nodes, the scalability management module including:

a dedicated processor for managing the plurality of nodes, the dedicated processor not being from the plurality of processor nodes; and

a scalability chipset for enabling the dedicated processor to dynamically configures the plurality of nodes into a coordinated multi-node computer,

wherein the multi-node computer is configured by the scalability management module without a re-wiring of connections between processor nodes during a subsequent reconfiguration of the multi-node computer.

2. The system of claim 1, wherein the scalability chipset comprises:

a memory controller

a scalability controller, and

a host bridge controller.

3. The system of claim 1, wherein the plurality of processor nodes includes a hot spare node capable of being configured by the scalability management module if another of the processor nodes fails or is removed from the multi-node computer.

4. The system of claim 1, further comprising:

a remote manager logic coupled to the scalability management module, wherein the remote manager logic controls the configuration of the multi-node computer via the scalability management module.

5. A method for dynamically configuring a multi-node computer, the method comprising:

performing a primary boot on a plurality of processor nodes;

registering configuration parameters from each of the processor nodes with a scalability management module, the scalability management module including:

a dedicated processor for managing the plurality of nodes, the dedicated processor not being from the plurality of processor nodes; and

a scalability chipset for enabling the dedicated processor to dynamically configures the plurality of nodes into a coordinated multi-node computer,

configuring each processor node according to configuration data supplied by the scalability management module; and

completing a full boot on a host processor node, the host processor node being selected by the scalability management module from the plurality of processor nodes, to enable the host processor node to control the multi-node computer.

6. The method of claim 5, wherein the scalability chipset comprises:

a memory controller

a scalability controller, and

a host bridge controller.

7. The method of claim 5, wherein the plurality of processor nodes includes a hot spare node capable of being configured by the scalability management module if another of the processor nodes fails or is removed from the multi-node computer.

8. The method of claim 5, further comprising:

coupling a remote manager logic to the scalability management module, wherein the remote manager logic controls the configuration of the multi-node computer via the scalability management module.

9. A computer program product, residing on a computer usable medium, for dynamically configuring a multi-node computer, the computer program product comprising:

program code for performing a primary boot on a plurality of processor nodes;

program code for registering configuration parameters from each of the processor nodes with a scalability management module, the scalability management module including:

a dedicated processor for managing the plurality of nodes, the dedicated processor not being from the plurality of processor nodes; and

a scalability chipset for enabling the dedicated processor to dynamically configures the plurality of nodes into a coordinated multi-node computer,

program code for configuring each processor node according to configuration data supplied by the scalability management module; and

program code for completing a full boot on a host processor node, the host processor node being selected by the scalability management module from the plurality of processor nodes, to enable the host processor node to control the multi-node computer.

10. The computer program product of claim 9, wherein the scalability chipset comprises:

a memory controller

a scalability controller, and

a host bridge controller.

11. The computer program product of claim 9, wherein the plurality of processor nodes includes a hot spare node capable of being configured by the scalability management module if another of the processor nodes fails or is removed from the multi-node computer.

12. The computer program product of claim 9, further comprising:

program code for coupling a remote manager logic to the scalability management module, wherein the remote manager logic controls the configuration of the multi-node computer via the scalability management module.

13. A service for dynamically configuring a multi-node computer, the service comprising:

performing a primary boot on a plurality of processor nodes;

registering configuration parameters from each of the processor nodes with a scalability management module, the scalability management module including:

a dedicated processor for managing the plurality of nodes, the dedicated processor not being from the plurality of processor nodes; and

a scalability chipset for enabling the dedicated processor to dynamically configures the plurality of nodes into a coordinated multi-node computer,

configuring each processor node according to configuration data supplied by the scalability management module; and

completing a full boot on a host processor node, the host processor node being selected by the scalability management module from the plurality of processor nodes, to enable the host processor node to control the multi-node computer.

14. The service of claim 13, wherein the scalability chipset comprises:

a memory controller

a scalability controller, and

a host bridge controller.

15. The service of claim 13, wherein the plurality of processor nodes includes a hot spare node capable of being configured by the scalability management module if another of the processor nodes fails or is removed from the multi-node computer.

16. The service of claim 13, further comprising:

coupling a remote manager logic to the scalability management module, wherein the remote manager logic controls the configuration of the multi-node computer via the scalability management module.